



## Tropical Storm Harvey 2017 9/1/2017 – 0800 CDT Update

### HIGHLIGHTS

#### Texas

Arkema is reported as of 4:30 pm that three additional peroxide trailers are close to Self-Accelerating Decomposition Temperature (SADT). The three trailers nearing SADT are reportedly within thirty feet of each other. Region 6 continues to work with Interagency Modeling Atmospheric Assessment Center on modeling of anticipated future releases at the site. The modeling products are being delivered to Unified Command.

The aircraft was in the air as of 0530. Worked on the system until 0100 and hope is works.

Arkema has had no substantial changes since first peroxide critical degradation/ decomposition and subsequent fire earlier this morning. Access to the facility is still not possible and unsafe. The 1.5 mile radius evacuation is still in effect. ASPECT has performed 5 overflights with no detections, with the exception of 2 detections of benzoyl peroxide at approximately 5 ppm which is just above the detection limit. Mobile ground air monitoring for pollutants of concern including VOCs, SO<sub>2</sub> and CO. Not many points to collect data are available due to exclusion zone, flood waters, and no roads present.

- 2 EPA team
- 1 Harris County Pollution Control team
- 1 Liberty County team (county to the east).

So far all readings are non-detect at ground monitoring

- At around 2:20 pm CST, the RP indicated that three of the remaining eight trailers storing heat sensitive peroxides were reaching the self-accelerating decomposition temperature and close to critical degradation/fire. There's still a possibility of explosion or rapid exothermic reaction. The three trailers are part of the six that are stationed closed together in the far north side of the facility, hence the possibility that all six could become damaged almost simultaneously because of proximity.

- UC established with EPA, TCEQ, Crosby FD, Harris County Fire Marshal Office, and RP.

- Expecting on maintaining a presence 24-hrs

It appears that the temperature in the trailers has stabilized due to cool night conditions and because the material was initially at -20 F to -30 F, aiding in the cooling of the trailer itself. Expecting to rise again once ambient temperatures increase today (around 90 degrees).

ASPECT aircrew will be moving their base of operations from Addison Airfield to Hobby Airfield. This will position the aircraft closer to the target areas and reduce the transit time by more than one hour. The ASPECT technical reach-back team will remain in Addison, TX.

EPA and Liberty County teams conducted air monitoring and no elevated readings were detected.

Due to changes in teams and addition of USCG and GLO to our Command Structure, plus the Directed Emphasis from the Governor and TCEQ on Drinking and Waste Water facilities. We are changing to a 24 hour operational period. Our original IAP was never finalized as things changed from the moment it was written through the day today. The new IAP will be made available this evening. Please let me know if you have any questions.

Poison Control Centers are set up in Texas to help citizens who have health concern questions concerning the Arkema facility, as well as any other flood related health questions.

Region 6 is coordinating with counterparts in Beaumont/Port Arthur, Texas in charge of potential response activities including the Texas Commission on Environmental Quality (TCEQ) in Beaumont, the Texas General Land Office in Nederland, and the U.S. Coast Guard in Port Arthur. All agencies are limited in their ability to conduct assessments due to the flood waters that continue to rise. Flood waters are predicted to crest over the weekend and response partners plan to initiate Rapid Needs and Shoreline assessments next week. The USCG has not observed oil or hazardous materials releases during rescue operations in the area. If the area is accessible, EPA, TGLO, and TCEQ will establishment of a Unified Command near the USCG office in Port Arthur, Texas.

On August 31, 2017, the EPA representative at the FEMA's Regional Response Coordination Center reported that the City of Beaumont is out of potable water. The drinking water system's pumps are underwater and not functional.

ESF-15 FEMA Public Affairs is establishing a Joint Information Center in Austin at the newly established Joint Field Office (JFO). A request to staff the EPA PIO position at the JIC/JFO is on order. The EPA Public Information Unit in Dallas is fully operational and supported by a Public Information Assistance Team (PIAT). An EPA PIO is also in Corpus Christi to support operations there. The Dallas PIO Unit distributed two EPA HQ-issued statements to R6 media, Congressional Offices, NGOs and other regional stakeholder lists. (Administrator Pruitt's statement on the reported explosion at the Arkema facility in Crosby: <https://www.epa.gov/newsreleases/epa-statement-reported-explosion-chemical-plant-crosby-texas> ; EPA's joint statement with Texas officials responding to the Arkema incident: <https://www.epa.gov/newsreleases/local-state-federal-joint-statement-texas-chemical-plant-fire> )

## Louisiana

The EPA Regional Emergency Operations Center Liaison for the State of Louisiana, is reporting that the Louisiana Department of Environmental Quality (LDEQ) does not currently have any environmental emergencies resulting from the Hurricane Harvey rainfall. To date, LDEQ has not set up its IMT and does not plan to unless something significantly changes. LDEQ is making calls associated with some waste water treatment plants in the area. The main focus for Louisiana at this point is supporting individuals evacuating from impacted areas in Texas. EPA continues to monitor the situation in Louisiana and stay in close communication with LDEQ.

## Resources

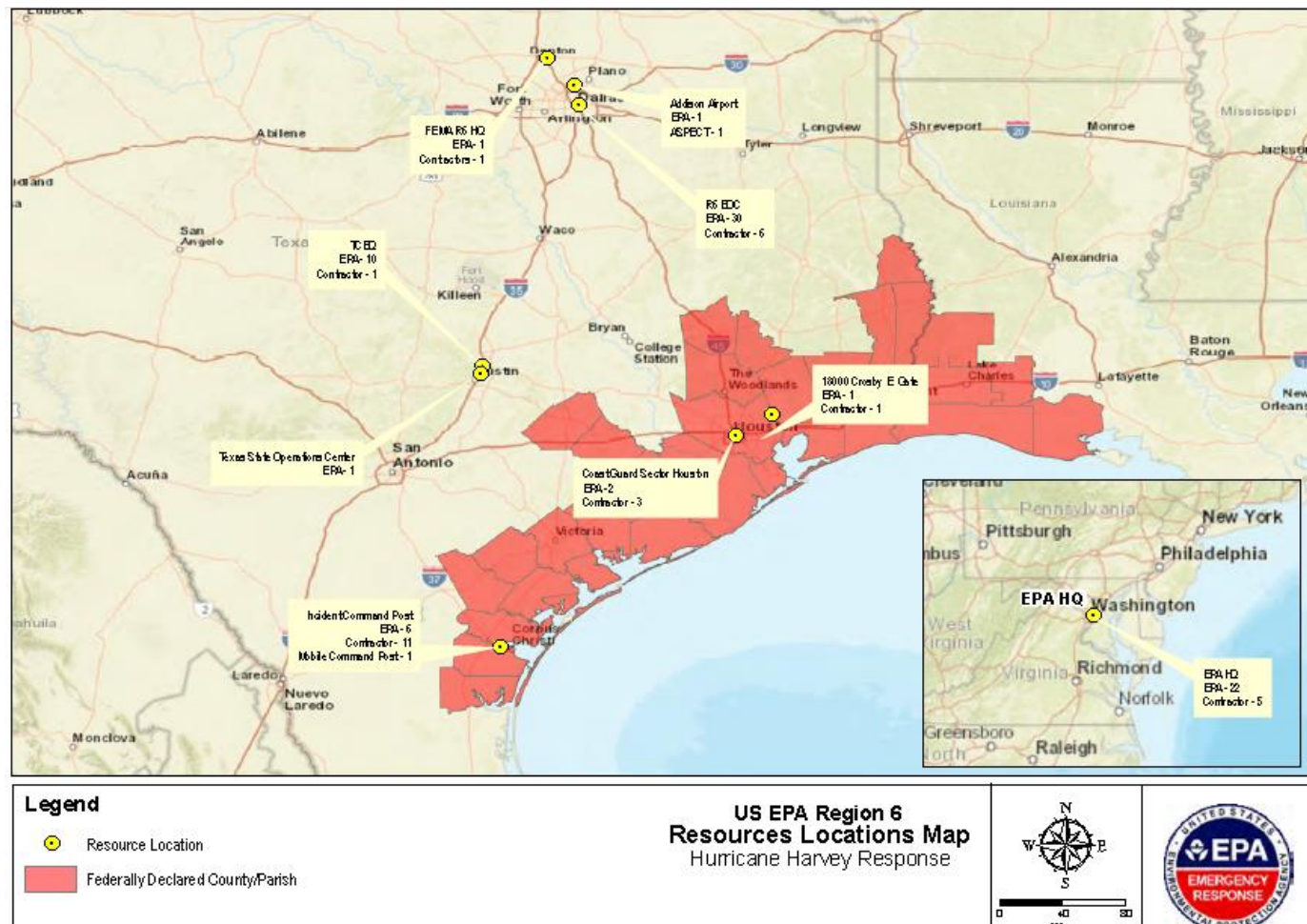
Personnel	EPA Dallas, TX	FEMA Denton, TX	Texas SOC Austin, TX	TCEQ Austin, TX	Houston, TX	Corpus Christi, TX	HQ EOC Wash DC	Totals
EPA	30	1	1	10	2	6	22	72
START	5			1	3	5		14
ERRS						6		6
Other Contractors	1						5	6
TOTAL	36	1	1	11	5	17	27	98

\*Additional personnel who are in transit may not be reflected in resource table.

On August 31, 2017, EPA deployed four teams made up of On Scene Coordinators and contractors to Houston to coordinate with TCEQ, TGLO, and US Coast Guard and begin responding to releases and spills at facilities. The teams will conduct rapid needs assessments, oil assessments, and hazards evaluations. These teams are scheduled to begin sampling the flood water on Saturday September 2, 2017. The flood water will be analyzed for volatiles, semi-volatiles, pesticides, Polychlorinated Biphenyls (PCBs), and Total Analyte Metals (TALs).

EPA is deploying four teams of On Scene Coordinators and contractors to Beaumont-Port Arthur to coordinate with TCEQ, TGLO, and US Coast Guard in responding to releases and spills at facilities. These teams will stage in Houston until weather allows them to enter the Beaumont-Port Arthur area.

On Saturday, September 2, 2017, EPA will send four additional Drinking Water/Wastewater Assessment Teams to Corpus Christi, and four Drinking Water/Wastewater Assessment Teams to Houston.



## Spill/Release Response

Hotline Calls as of August 31, 2017	
Number of Harvey Related Calls Received During Reporting Period 0100 and 1300 hrs	22
Total Number of Harvey Related Calls to Date	85

On August 31, 2017 the Unified Command has five teams in the field conducting reconnaissance. The teams consist of personnel from TCEQ, Civil Support Team (CST), EPA, and a USCG. These teams are conducting hazard evaluations of orphaned containers found during field reconnaissance in Corpus Christi. An additional twelve teams consisting of USCG and TCEQ were deployed to Houston to conduct hazard evaluations of orphaned containers found during field reconnaissance. Evaluations are used to determine actions needed to stabilize or remove items in the future. One TCEQ water infrastructure team is conducting water system assessments in the Corpus Christi area.

The Conoco Phillips facility in Cuero, Texas reported a 316-barrel oil spill due to Hurricane Harvey. The spill impacted Denton Creek. This was originally reported on August 29, 2017. On August 31, 2017, Conoco Phillips indicated that they cannot drive to the facility. The Texas Railroad Commission and USCG drove as close to the facility as they could yesterday. No sheen of oil was observed, but the water flowed at a good pace. Waters are receding in the area and personnel will likely be able to access the facility to better assess the release and perform a response in the next day or so. Conoco Phillips is updating their release totals to 385 barrels of oil and 76-barrel produced water since the tanks are on their side.

### EPA Emergency Response Assets

ASPECT is making multiple overflights of the Arkema facility. Preliminary indications from the onboard infrared monitoring instruments indicate peroxide emissions. These detections were made about 200 meters downwind of the plant.

### Quality Assurance Sampling Plans (QASP)

Regional Emergency Operations Center Environmental Unit (EU) members have incorporated Headquarters Emergency Operations Center (HQ EOC) comments into the EPA QASP for surface /flood water. As of August 31, 2017 the surface/flood water QASP is going through the approval process. The EU is incorporating HQ EOC comments into the QASP for dirt. These sampling plans have been created to address public health concerns regarding possible contaminants found in storm water and soil that was displaced during the storm.

### Drinking Water / Wastewater Assessments

One Water Infrastructure team consisting of two TCEQ staff are assessing systems based on information developed by the TCEQ/EPA call bank in Austin, TX. Additional EPA Region 6 Water

Team members are prepared to deploy to Corpus Christi once lodging is established.

EPA continues to support TCEQ in contacting drinking water and waste water systems. EPA deployed 10 personnel to assist TCEQ's Drinking Water and Waste Water Phone Bank located in Austin, Texas on August 28, 2017.

#### **Drinking Water - Total # of Systems: 4512**

STATUS	NUMBER OF SYSTEMS
Contact Pending	202
Bacteria Sample Results Pending	5
Out of Contact	21
On generator – lost pressure	7
No problems	421
On generator – never lost pressure	19
No Status	3750
Lost pressure & or Treatment	39
Site visit needed	1
Lifted boil water notice due to negative bacteria samples. Normal Ops resumed	10
Not Operating	37

#### **Waste Water - Total # of Systems: 2467**

STATUS	NUMBER OF SYSTEMS
Contact Pending - Phone evaluation only	52
Out of Contact - phone evaluation only	5
No Problems	402
No Status	1942
Waste Water Treat. Plant and/or Collection on Generator or bypass pumps for Lift Station	24
Waste Water Treat. Plant and/or Collection non-operational no Sanitary Sewer Overflow	27
WWTP and/or Collection Partially Operational Sanitary Sewer Overflow	15

#### **EPA Laboratory/ Analytical Services**

The Houston laboratory will be closed until Tuesday September 5, 2017. The laboratory and office building are not damaged. EPA has back up capabilities for laboratory services should the Houston facility remain closed.

EPA's organic chemical mobile laboratory arrived in San Antonio, Texas on August 31, 2017. The mobile laboratory can be utilized to process environmental samples.

## **Data Management**

Continue to support operations in Corpus Christi and the Houston/Crosby area. Continue to coordinate with and support the TCEQ/EPA Drinking Water and Waste Water teams with their assessment operations. Continue to work with the PIO on a public information strategy that shows EPA resources deployed and the status of NPL Sites in the impacted areas.

## **Communications**

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## **Refineries/Fuel Waivers**

1. TEXAS: EPA approved the State of Texas' request to extend the Texas fuel waiver to allow use of non-road diesel fuel in on-road applications. This non-road fuel has different tax treatment, and to differentiate it, is colored with red dye. The Internal Revenue Service (IRS) issued a waiver of the dyed diesel fuel penalty through September 15, 2017. The IRS will not impose a penalty when dyed diesel fuel is sold for use or used on the highway.
2. LOUISIANA: A waiver that would allow use of 9.0lb. RVP was approved on 28 August. LDEQ thanked EPA, R6 and Department of Energy for the quick turnaround and assistance this week
3. OKLAHOMA: A statewide low Reid Vapor Pressure (RVP) fuel waiver request was submitted on August 28, 2017, and amended their request on August 30 expanding 11.5 RVP waiver nationwide.
4. ARKANSAS: The State is drafting a waiver request to temporarily waive the requirement for low 9.0lb RVP fuel.
5. On August 30<sup>th</sup>, EPA issue a waiver for the temporary use of 11.5 PSI RVP gasoline in the following states: Alabama, Georgia, Kentucky, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, Texas, Louisiana, Florida and the District of Columbia. For Texas and Louisiana, it expands the waiver coverage area from the earlier waiver granted.
6. EPA issued a waiver for 38 states and the District of Columbia of all low volatility gasoline

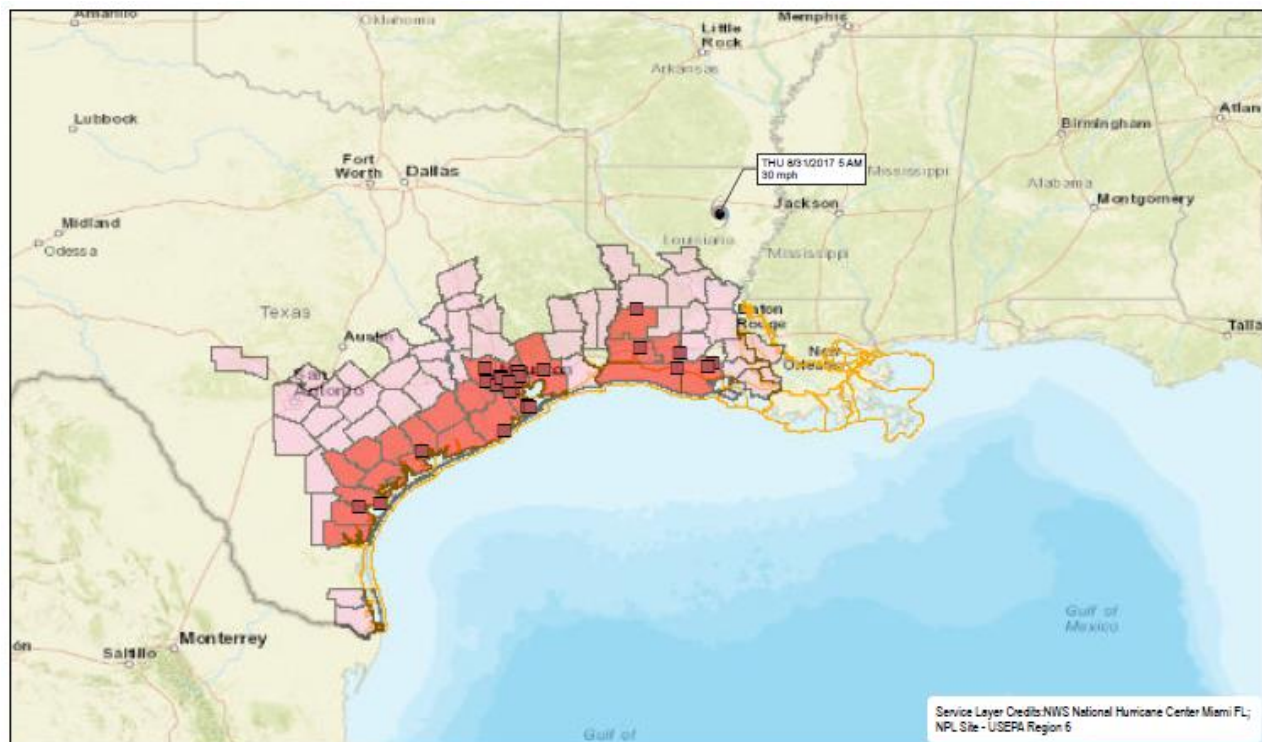
requirements in any State Implementation Plan that applies in the designated states. This waiver now includes all five Region 6 states: Arkansas, Louisiana, New Mexico, Oklahoma and Texas. The waiver for El Paso, Texas goes until September 16, 2017 due to their State Implementation Plan requirements.

### Funding

Funding Sources	Funding Ceiling	Spent to Date	Remaining Balance	Daily Burn Rate
Non Mission Assignment	N/A	\$64,200.00	\$0.00	
MA 4332DR-TX-EPA-01	\$20,000.00	\$0.00	\$20,000.00	
MA 4332DR-TX-EPA-03	\$8,592,000.00	\$75,864.86	\$8,516,135.14	\$37,932.43
Totals:	\$8,612,000.00	\$75,864.86	\$8,536,135.14	

### Superfund NPL Sites

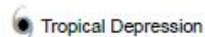




#### Legend

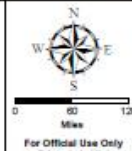
- NPL Sites
- Coast Guard Area of Responsibility
- Federally Declared
- State Declared

National Hurricane Center



#### US EPA Region 6 National Priority List (NPL) Sites in Federally Declared Counties/Parishes

Hurricane Harvey Response  
National Weather Service  
Public Advisory #44  
0400 CDT 20170831



EPA GIS  
Printed: 5/32/12 AM 5/31/2017

FILE: C:\GIS\Bentley\workspace\2017\0831\NPL\_Federally\_Declared\_Only\_Harvey\_20170831\_0500.mxd 5/32/12 AM 5/31/2017 npl06

Superfund Sites within Federally Declared Counties			8/31/2017
	Status Summary		
TEXAS			
SITE NAME	Inspected	Offsite Release	Onsite Damage
BRINE SERVICE CO.	8/30/17	No	No
FALCON REFINERY	8/30/17	No	No
ALCOA (Point Comfort) / LAVACA BAY			
BRIO REFINING INC.			
CRYSTAL CHEMICAL CO.			
DIXIE OIL PROCESSORS INC.			
FRENCH, LTD.			
GENEVA INDUSTRIES / FUHRMANN ENERGY			
GULFCO MARINE MAINTENANCE			
HARRIS (FARLEY STREET)			
HIGHLANDS ACID PIT			
JONES ROAD GROUNDWATER PLUME			
MALONE SERVICES COMPANY			
MANY DIVERSIFIED INTERESTS, INC			
MOTCO, INC.			
NORTH CAVALCADE STREET			
PATRICK BAYOU			
PETRO-CHEMICAL SYSTEMS, INC. (Turtle Bayou)			
SAN JACINTO RIVER WASTE PITS			
SIKES DISPOSAL PITS			
SOL LYNN / INDUSTRIAL TRANSFORMERS			
SOUTH CAVALCADE STREET			
TEX-TIN CORP.			
US OIL RECOVERY			
LOUISIANA			
AMERICAN CREOSOTE DERIDDER			
GULF STATE UTILITIES (North Ryan Street)			
MALLARD BAY LANDING BULK PLANT			
SBA SHIPYARD			
PAB OIL & CHEMICAL SERVICE			
GULF COAST VACUUM SERVICES			
D.L. MUD, INC.			